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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,513	08/20/2003	Bryce A. Jones	2305	6581
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			ART UNIT	PAPER NUMBER
			2618	
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			01/25/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/644,513

Applicant(s)

JONES ET AL.

Examiner

TUAN H. NGUYEN

Art Unit

2618

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-11 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-11 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see applicant's remarks, filed on 12/02/2009, with respect to the rejection(s) of claim(s) 1, 3-4, 6-11 and 20 under 35 U.S.C § 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.
2. Claims 2, 5 and 12-19 cancelled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-4, 6-9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karaoguz et al. (U.S PUB. 2002/0059434 hereinafter, "Karaoguz") in view of Lu et al. (U.S PAT. 6,694,134 hereinafter, "Lu") and Forte (U.S PAT. 7,162,020) and further in view of Bridgelall (U.S PAT. 7,039,027).

Consider claim 1, Karaoguz teaches a wireless local area network (WLAN) for providing wireless telecommunications services to a multi-mode mobile station, said

multi-mode mobile station being able to wirelessly communicate with a wireless wide area network (WWAN) when operating in a first wireless coverage area, said WWAN including a first data register that contains a first data record for multi-mode mobile station (fig. 2 page 3 [0038]), said WLAN comprising: at least one wireless access point providing a second wireless coverage area, said multi-mode mobile station being able to wirelessly communicate with at least one wireless access point when multi-mode mobile station operates in second wireless coverage area (fig. 3 page 3 [0041]).

Karaoguz does not explicitly show that a private branch exchange (PBX) communicatively coupled to said at least one wireless access point.

In the same field of endeavor, Lu teaches a private branch exchange (PBX) communicatively coupled to said at least one wireless access point (fig. 1 col. 6 lines 11-34 and col. 6 line 53 through col. 7 line 19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, a private branch exchange (PBX) communicatively coupled to said at least one wireless access point, as taught by Lu, in order to provide a communication system or network and method for enabling information processing devices, such as portable computers or personal digital assistants (PDAs), to communicate with telephones of private and public networks via an access point of a wireless local area network (WLAN).

Karaoguz and Lu in combination, fail to teach a second data register co-located with said PBX and communicatively coupled to said first data register, wherein said second data register stores a second data record for multi-mode mobile station When

multi-mode mobile station operates in said second wireless coverage area, said second data register being able to transmit at least one mobility management message to said first data register.

However, Forte teaches a second data register (wireless connect unit WC) co-located with said PBX and communicatively coupled to said first data register, wherein said second data register stores a second data record for multi-mode mobile station. When multi-mode mobile station operates in said second wireless coverage area, said second data register being able to transmit at least one mobility management message to said first data register (col. 11 lines 51-55 and col. 12 lines 6-22).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Forte into view of Karaoguz and Lu in order for selectively establishing communication with one of plural devices associated with a single telephone number is provided.

Karaoguz, Lu and Forte in combination, fail to teach first data register is a home location register (HLR); and at least one mobility management message facilitates roaming between said first and second wireless coverage areas by multi-mode mobile station.

However, Bridgelall teaches first data register is a home location register (HLR) (col. 5 lines 48-60); and at least one mobility management message facilitates roaming between said first and second wireless coverage areas by multi-mode mobile station (fig. 2 col. 5 line 47 through col. 6 line 6).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Bridgelall into view of Karaoguz, Lu and Forte in order for automatic and seamless vertical roaming between a WLAN and WWAN by detecting second network availability for switching over while maintaining an active voice or data connection on the first network so that the existing connection is maintained and the transition is continuous.

Consider claim 3, Lu further teaches PBX is communicatively coupled to a packet-switched network (col. 3 line 63 through col. 4 line 3).

Consider claim 4, Lu further teaches PBX is communicatively coupled to a circuit-switched telephone network (col. 3 line 63 through col. 4 line 3).

Consider claim 6, Karaoguz further teaches at least one mobility management message includes a registration message that second data register sends to first data register when multi-mode mobile station operates in wireless coverage area, registration message identifying multi-mode mobile station (page 3 [0041]).

Consider claim 7, Karaoguz further teaches at least one mobility management message includes a routing message, routing message including routing information to route a call to multi-mode mobile station (page 3 [0041]).

Consider claim 8, Karaoguz further teaches routing information includes a directory number associated with said PBX (col. 6 lines 30-34).

Consider claim 9, Lu further teaches routing information includes a directory number associated with a media gateway communicatively coupled to said WLAN via a packet-switched network (col. 7 lines 1-19).

Consider claim 20, Bridgelall further teaches second data register is a virtual visitor location register (col. 5 lines 48-60).

5. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karaoguz in view of Lu and Forte and further in view of Thornton et al. (U.S. PUB. 2002/0101860 hereinafter "Thornton").

Consider claim 10, Karaoguz, Lu, and Forte, in combination fails to teach routing information includes an Internet Protocol (IP) address of PBX.

However, Thornton teaches routing information includes an Internet Protocol (IP) address of PBX (page 32 [0300]).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Thornton into view of Karaoguz, Lu, and Forte, in order for a telephony gateway intended for use, e.g., paired use, at opposite ends of a data network connection, in conjunction with at each end, e.g., a private branch exchange (PBX) for automatically routing telephone calls, e.g., voice, data and facsimile, between two peer PBXs over either a public switched telephone network (PSTN) or a data network.

Consider claim 11, Thornton further teaches routing information includes an Internet Protocol (IP) address of multi-mode mobile station (page 1 [0007]).

Conclusion

6. Any response to this action should be mailed to:

Mail Stop_____ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22313

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571)272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571)272-7882882. The fax phone

number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information Consider the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan H. Nguyen/
Examiner
Art Unit 2618